

Although aerial photography, topographic and soil maps, and land use images are helpful in identifying potential natural areas, on-site visits are necessary to determine a site's condition and quality, and which natural features are present. It is possible that new high quality natural areas will be found over time as formerly inaccessible or unknown areas become available for study.

## **DESCRIPTION OF THE STUDY AREA**

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This report describes the natural area inventory of Duplin County (Figure 2). It is bordered by Wayne County on the north; Lenoir, Jones, and Onslow counties along the east; Pender County along the south; and Sampson County along the west. As of 1999, approximately 53% of the land surface of Duplin County was forested (Conner & Sheffield 2001). At 818 square miles, it is the ninth largest of North Carolina's 100 counties. With a population of 51,985 in the 2005 estimated census (U.S. Census Bureau 2007), it is the 50<sup>th</sup> most populous county in the state, but its large land area makes it the 29<sup>th</sup> least densely populated county at about 64 people per square mile. Wallace is the largest municipality, with a population of 3,344 (2000 census), and Kenansville is the county seat.

Among all North Carolina counties, Duplin ranks third in total amount of farm land and total harvested cropland acreage (2002 data) (NC LINC Reports 2007). Nearly half of the county land area (45%) is currently actively farmed, and it has been stated that "(m)ost of the soil suitable for agriculture has been cleared and farmed at one time or another" (Goldston 1959). Of the 53% of the county land surface that is forested (as of 1999), virtually all is managed for timber, although much of it is in wetland floodplain habitat. As a result, almost all of the county land surface has been altered from the original natural condition outside of Angola Bay Game Land (Figure 2), and outside of some floodplain features such as along Northeast Cape Fear River and Goshen Swamp. Portions of these floodplains continue to be harvested for timber and converted to other uses.

Virtually the entire county is within the Cape Fear River Basin except for very small areas in the northeastern part of the county in the White Oak River Basin, which includes New River, and the Neuse River Basin (Figure 3). The Northeast Cape Fear River is the county's primary drainage, with an area along the western part of the county between Faison and Magnolia drained by Black River. Both rivers are tributaries of Cape Fear River.